

## **Abstract**

### **MPLS DEVICE ENABLING SERVICE PROVIDERS TO CONTROL SERVICE LEVELS IN FORWARDING OF MULTI-LABELED PACKETS**

A MPLS device which receives configuration data identifying a group of multi-labeled packets and desired EXP bits (even in the lower label entries of the label stack) for the group when forwarding the related packets. The MPLS device sets the EXP bits of even such lower label entries, and then forwards the multi-labeled packets. MPLS devices further down the path may provide different services for different multi-labeled packets depending on the EXP bit values. A service provider may configure a autonomous system border router (ASBR) to control service levels for while packets are forwarded further down the path (even in autonomous systems not related to the service provider) according to an aspect of the present invention.